

Portland Harbor Assessment—Problem Formulation Document, Feb 4, 2002  
and Proposed Database Approach Document, Dec 20, 2001

To: Chip Humphrey, USEPA, Portland Office  
From: Kenneth Kauffman, Environmental Health Specialist  
Environmental Toxicology Section  
Department of Human Services

Date: March 7, 2002

Chip, I am sending you our comments on the two referenced documents so they can be incorporated with others or forwarded to the Lower Willamette Group.

First we have some comments and questions about Table 012502.xls from the December 2001 proposal for a testing database.

1. We are concerned that the listing of chemicals of interest is incomplete in terms of necessary fish tissue testing. Particularly the list is lacking in a number of common chlorinated organic pesticides that are commonly found in Willamette River fish. We suggest that the analytical suite used by DEQ laboratory in their fish analyses be used as a starting point for selection of target compounds for tissue testing.
2. Preliminary target goals are given for less than half of the compounds listed in the table. Does this mean that the intent is to test for only those compounds? We recommend that tissue be tested for the same suite of chemicals used in sediment analyses.
3. What is the basis for deriving the numerical tissue goals? It appears that most of them are merely twice the stated sediment goal. Tissue goals should be derived from the oral reference dose and/or the cancer slopes for each compound.
4. The table suggests that PCB's will be analyzed only as aroclors. We believe that aroclor analysis as well as congener analysis is needed. Primary congeners of concern should be taken from USEPA fish guidance for dioxin-like PCB's.
5. In summing tissue data, all non-detect findings should be reported and incorporated in calculations as one half the detection limit for each contaminant.



Second, we offer the following comments and questions regarding the Problem Formulation Document of Feb 4, 2002.

1. We believe the summary of human activities, Section 3.3, page seriously understates the scope and range of human activities within the ISA. Bank and dock fishing is common where ever the public can reach the riverbank regardless of ownership or zoning. There is evidence of transient habitation and activity throughout the ISA. Bank and dock fishing is quite common during fair weather.
2. In section 3.5 page 16, paragraph 4 "background" and "reference" sites are discussed generally, but not specifically. We are very interested in the specific selection of these criteria and reference points.
3. In that same section, on page 17 comparison benchmarks are discussed but not specified. We recommend that health screening criteria recommended by USEPA fish guidance be adopted directly for the tissue benchmarks.
4. We are very concerned about the proposal to test only four fish and to consider them representative of all species for the human health assessment. We believe that testing of all species known to be consumed by humans be seriously considered. Our experience suggests that species vary considerably in the way they accumulate contaminants. A given species does not demonstrate the same character from one waterbody to another.
5. We are very concerned about the assumption that anadromous fish are not affected by the passage through freshwater, particularly we are concerned about adult lamprey and spring chinook salmon which may spend as much as six months in fresh water before spawning. Both of these species are commonly consumed by Native Americans, and should be tested for chemicals of concern in the ISA.
6. We seriously question the assumption that any single species can be safely assumed to accurately reflect the contaminant loading of another species for the broad range of chemicals of concern found in the harbor. We believe that all species known to be used for human food should be tested and assessed.
7. We recommend that crayfish and freshwater clams be included in the sampling, analysis and assessment.

8. The document does not provide any detail as to the proposed tissue sample numbers or method to be used for determining numbers of samples to be taken. Again we suggest that USEPA's guidance be used in designing that portion of the study.
9. The document provides no detail as to tissue sample types to be tested. We recommend that a proportion of the samples be tested as whole body, a portion as fillet and that remainders be tested separately from fillet portions.

I appreciate the opportunity to comment on the draft proposals and I am available to discuss these comments or related matters.

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